



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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November 21, 2008

Ms. Lindy McDowell
Federal Aviation Administration
Orlando Airports District Office
5950 Hazeltine National Drive, Suite 400
Orlando, Florida 32822-5024

Subject: EPA's NEPA Review Comments for FAA's DEIS for "Palm Beach International Airport"; Palm Beach County; Airfield Improvement Project; CEQ# 20080369; ERP# FAA-E40822-FL

Dear Ms. McDowell:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced FAA DEIS for the proposed Airfield Improvement Project (AIP) at Palm Beach International Airport (PBIA) in accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. EPA has previously provided scoping comments in a letter dated March 22, 2007.

Project Description

FAA currently designates PBIA as a "medium-hub primary commercial service airport." A total approaching seven million passengers using 18 different commercial passenger air carriers were accommodated by PBIA in 2006 (project baseline). The current airport runway layout consists of an east-west primary runway (9L/27R) with 10,000-ft x 150-ft dimensions that serves commercial aircraft; a closely-spaced "southern" parallel east-west runway (9R/27L) with 3,210-ft x 75-ft dimensions that serves General Aviation (GA) aircraft; and a north-south crosswind runway (13/31) with 6,932-ft x 150-ft dimensions intersecting the primary runway that serves GA aircraft and commercial aircraft as needed. In essence, however, PBIA operates as a one-runway airport for commercial flights, since the southern runway cannot accommodate commercial airliners, the crosswind intersects with the primary runway, and the parallel runways are only separated by 700 feet. Accordingly, PBIA has two dependent air carrier runways and one dependent GA runway (pg. 2-3). FAA regulations require a minimum 800-ft centerline separation for parallel runways for commercial ARC D-IV type airports (pg. ES-45) such as PBIA.

Numerous alternatives were screened in the DEIS using a Level 1 (Purpose and Need), Level 2 (Airfield Design Criteria) and Level 3 (Environmental Considerations) evaluation approach. Most offsite alternative modes of transportation, offsite reliever or

new airports, and numerous onsite runway configurations were screened out in the process. The “Proposed Project” configuration preferred by the Airport Sponsor (Palm Beach County Department of Airports) and the “Alternative 2” design were carried forward in the DEIS for detailed analysis, as summarized in Table ES-5.

The Sponsor’s Proposed Project would extend the length of the southern GA runway (9R/27L) by +4,790 feet (from 3,210 ft to 8,000 ft) and widen it by +75 feet (from 75 ft to 150 ft).¹ This modification would provide PBIA with a second commercial runway parallel to the primary runway to help accommodate additional operations and annual/hourly peak demands for design years 2013 and 2018. In addition, the southern runway would be relocated to the south by 100 feet to attain the minimum FAA centerline separation distance of 800 feet for the operation of commercial aircraft on parallel runways for ARC D-IV airports. After the project, the primary runway would principally serve airport departures while the extended southern parallel runway would principally serve arrivals.

Additional AIP modifications would mainly involve taxiways, the crosswind runway and the Runway Safety Areas (RSA). In addition to also extending associated taxiways to accommodate the proposed new airport configuration, the crosswind runway would be reconfigured, resulting in an overall shorter (4,000 ft) but wider (150 ft) crosswind runway that is decoupled from the primary runway. Moreover, the size of the RSAs at the ends of the southern and the crosswind runways would be made compliant with FAA regulations and airport lighting, navigational aids and other modifications would also be provided. The AIP would also require relocation of a portion (750 ft) of the Airport West Canal, acquisition of 8.5 acres of land, and relocation of some existing airport facilities.

Alternative 2 is similar to the Sponsor’s Proposed Project except that it would eliminate the crosswind runway (instead of reconfiguring it) and add another 10,000-ft parallel runway 800 feet north of the primary runway instead of extending the existing southern runway to 8,000 feet. The southern runway would be retained unchanged as a GA runway. From north to south, the three runways for Alternative 2 would become 9L/27R, 9C/27C and 9R/27L.

Although the project would extend the centerline separation distance between the primary and the to-be-modified southern runway from 700 feet to the FAA centerline separation threshold of 800 feet, it is our understanding that the commercial operation of these parallel runways – for both the Sponsor’s Proposed Project and Alternative 2 –

¹ The FEIS should provide a figure showing the existing layout of the airport that includes runway dimensions, which should also be discussed in the text. We note that without the dimensions of the existing “southern” GA runway (3,210 ft long and 75 ft wide), the magnitude of the Sponsor’s proposed extension (+4,790 ft) of this runway to 8,000 feet is unclear from the DEIS.

would still be as “dependent” rather than “independent” runways.² Nevertheless, the delay times at PBI would be improved since PBI is now essentially operating as a one commercial runway airport.

Specifically, present average delay times for the project baseline year (2006) are 4.8 minutes and are predicted to become 10.2 minutes for the design year for first operation (2013) and 20.6 minutes for the out year (2018) based on expected additional operations and enplanements. A four-minute delay “...is the threshold of acceptable delay as established by the FAA” (pg. ES-11). The annualized average delay times for the Sponsor’s Proposed Project are 2.3 minutes and 4.0 minutes for Alternative 2 for 2018 (pg. 3-72), with 2013 times presumed to be less due to fewer operations (the FEIS should specify). Besides a passenger inconvenience, it should be noted that lengthy delay times for departures (as well as arrivals) waste fuel (even if only one jet engine is used during taxiing) and therefore increase air emissions.

Project Impacts & Mitigation

EPA’s primary concerns with this project are the increases in noise exposures to residents and the air quality emissions of forecasted additional enplanements and operations. Direct, indirect (induced) and cumulative impacts are of concern. We offer the following summary comments on noise and air quality as well as alternatives, and have also provided additional comments in the enclosed *Detailed Comments*.

► Noise – Aircraft noise exposures were well documented in the DEIS. Exposure levels are predicted for numerous residents living within the 65+ DNL noise contours for 2013 and 2018, including exposure to significant +1.5 DNL and greater increases. No exposure to significant increases (+3.0 DNL or greater) was predicted to residents living within the 60 DNL.

EPA appreciates that noise mitigation was considered in the DEIS and that a number of homes and other sensitive noise receptors within the 65 DNL have already been sound-proofed by the Sponsor through previous efforts. However, if the project is pursued, the mitigation for noise exposures of residents should be substantively further addressed in the FEIS and finalized in the FAA Record of Decision (ROD).

FAA Order 1050.1E, as discussed on page 5-102 of the DEIS, defines “significant impact” as one that would (excerpted):

** Cause noise sensitive areas exposed to DNL 65 or higher to experience a noise increase of at least DNL 1.5.*

² The FEIS should discuss “dependent” and “independent” parallel runways in terms of FAA regulations and threshold centerline separation distances (700 vs. 800 vs. 2,500 vs. 4,300 ft) and in terms of their operation relative to reducing aircraft delay times.

** Cause an increase of DNL 1.5 that introduces new noise sensitive areas to exposure levels of DNL 65 or more.*

The FEIS should clarify if these two kinds of significant increases constitute FAA's noise mitigation position for the proposed project, *i.e.*, will they be applied to this project as suggested on page ES-81?³ More importantly, FAA should commit to such mitigation in the FEIS in a draft noise mitigation plan and finalize such commitment and plan in their ROD for this EIS.

We agree that noise mitigation is warranted for the above two forms of significance. We believe that all residents already living within the 65+ DNL noise contours that are significantly elevated (+1.5 DNL or more) by the proposed project, should be mitigated by the project (*i.e.*, this EIS process). We further agree that residents currently living outside the 65 DNL but that would be newly brought into the 65 DNL through a significant noise elevation (+1.5 DNL or more) due to the project should also be mitigated by the project. To ensure such mitigation, we recommend that the approval of the Airport Layout Plan (ALP) in the FEIS and ROD be conditioned to mitigate for those housing units enumerated in Chapter 5 that would experience a +1.5 DNL or greater increase due to the Proposed Project (386 units in 2013 and 423 units in 2018) or due to Alternative 2 (335 units in 2013 and 380 units in 2018).

Beyond the merits for mitigating for significant noise increases, we believe that such FAA noise mitigation should be expanded. Specifically, all other residential noise exposures newly brought into the 65 DNL by the project – regardless of their level of incremental increase – should also be mitigated by the EIS process. We base this on the fact that these residences would be located within the 65 DNL after the project and would therefore constitute a non-compatible land use by FAA definition. These residents should not have to rely on “possibly” receiving noise mitigation through another process such as the Part 150 Program to gain relief from aircraft noise. By design, the Part 150 process is a voluntary process intended to mitigate residual noise impacts that were left unmitigated by previous projects or that accrued incrementally between projects. The Part 150 process should, however, be used to mitigate any other residents already living within the 65 DNL that would not be affected by the project (*i.e.*, no incremental noise increase) since their residences would still constitute non-compatible land use within the PBIA 65 DNL.

For clarity, the FEIS should also provide four new overlay figures depicting the areas, land uses and populations that would be newly exposed to the 65 DNL (pg. 5-101) under various scenarios. That is, we recommend a figure comparing the noise contours for the No Action Alternative and the Proposed Project for 2013 (*i.e.*, depicting those 291 units with 772 people newly affected by the Proposed Project) and a similar figure for 2018

³ Page ES-81 of the *Executive Summary* should be made more consistent with page 5-102 of the text since page ES-81 currently does not specifically address the second significance bullet regarding residents that are newly introduced to the 65+ DNL contours by a +1.5 DNL or greater increase in project aircraft noise.

(+326 units with +808 people). For Alternative 2, we request two similar figures comparing the contours for the No Action Alternative and Alternative 2 for 2013 (+248 units with +615 people) and for 2018 (+262 units with +650 people).

Also regarding noise mitigation, we note that page 6-5 refers to FAA and Sponsor commitments (excerpted):

Mitigation measures for the FAA's Preferred Alternative will be committed to and implemented by the Airport Sponsor, if the proposed runway and other airfield improvements are approved by the FAA in its ROD.

EPA understands that a sponsor may not wish to commit to noise mitigation before FAA would commit to project approval in its ROD. However, if FAA and the Sponsor coordinate well during the EIS process, mitigation commitments by both parties could be made in the FEIS and ROD. EPA therefore recommends that during the timeframe between the DEIS and FEIS, FAA and the Sponsor should coordinate and agree upon a preferred alternative for the FEIS. During this time, the Sponsor and FAA should also agree upon noise mitigation measures (based on the greater 2018 exposure levels) and document a draft noise mitigation plan in the FEIS (we note that page 6-2 lists several mitigation measures being considered: “acquisition and relocation of homes”, “purchase of avigation easement”, “sound insulation in exchange for avigation easement” and “purchase assurance”). The FEIS should include FAA and Sponsor commitments to the above expanded mitigation in a draft mitigation plan. A finalized noise mitigation plan should then be documented in the FAA ROD, include FAA and Sponsor commitments, and be made available to all interested parties. Ultimately, the Sponsor (in consultation with FAA) would implement the final mitigation plan before the project is implemented (proposed 2013 start-up), and monitor the implemented measures where appropriate (sound-proofing) to ensure successful noise attenuation.

In regard to types of mitigation measures, EPA prefers that eligible residences be acquired by the Sponsor from willing sellers through direct acquisition or purchase assistance. This would particularly apply for homes located in the higher contours of the 65+ DNL contours. Secondly, we prefer that homes be sound-proofed by the Sponsor. The level of insulation might need to be greater for any residences located in higher contours that were not acquired. In contrast, the use of avigation easements would not mitigate noise exposures or change the land use to be compatible with airports (but could be useful for unwilling sellers). Overall, the implementation of noise mitigation should progress from residences experiencing higher levels and continue toward the 65 DNL.

► Air Quality – EPA offers the following summaries for onsite and offsite criteria pollutant National Ambient Air Quality Standards (NAAQS), Hazardous Air Pollutant (HAP) and Greenhouse Gas (GHG) emissions attributable to the project.

+ NAAQS: The Proposed Project's and Alternative 2's predicted reduction of average aircraft delay times can be expected to reduce air emissions at PBIA compared to the No Action Alternative. Nevertheless, as indicated on pages

ES-66 and ES-67, criteria-based air emissions at PBI A can be expected to increase during the design period (2013-2018) largely due to the forecasted increase in aircraft operations. The DEIS indicates that these increases are not expected to exceed the NAAQS. However, due to recent changes in the expected implementation timeline for the revised ozone NAAQS (discussed further in the enclosed *Detailed Comments*) occurring before or within the project design period (2013-2018), the FEIS still needs to explain how increased airport emissions will not adversely impact air quality such that the area will not violate the NAAQS. Moreover, beyond the design period, we believe that air emissions can be expected to further increase with continued growth in operations that presumably could otherwise not be accommodated without the proposed runway modification.

+ HAPs: Although we appreciate that a HAPs inventory for airport sources was provided in the DEIS, we continue to recommend that a screening level HAPs risk evaluation be prepared in order to allow an informed comparison among alternatives for the PBI A DEIS.

+ GHGs: In addition to project reduction of aircraft delay times, EPA recommends overall airport reductions in GHGs to further the “greening” of the airport through various measures such as alternative fuels, ground support equipment, auxiliary power units, electrification, idling practices, diesel retrofits, cell phone waiting areas, energy conservation, etc.

► Alternatives – In comparing noise exposure data (Chapter 5) for the two evaluated action alternatives, we note that Alternative 2 impacts notably fewer residents than the Proposed Project, both overall for 2013 (5,783 vs. 5,890 people) and 2018 (6,455 vs. 6,614 people) and significantly by +1.5 DNL or greater for 2013 (831 vs. 957 people) and 2018 (942 vs. 1,049 people) (also see enclosed noise summary table in *Detailed Comments*). These differences in alternatives would result in approximately 100-150 less people experiencing noise exposure under Alternative 2. From a noise exposure perspective, this benefit of Alternative 2 is noteworthy. Therefore, if the Sponsor’s Proposed Project is pursued, the additional noise exposures associated with this proposal should be considered during the mitigation process and in the FEIS and ROD.

EPA DEIS Rating

EPA rates this DEIS as an “EC-2” (Environmental Concerns, with additional information requested). We primarily base this rating on the magnitude of the predicted aircraft noise exposures to residents within the 65 DNL attributable to the project. Additional noise information, mitigation and commitments are requested in the FEIS and ROD.

Summary

EPA's primary concerns with this project are the increases in aircraft noise exposures to residents and the air quality emissions of forecasted additional enplanements and operations. Direct, indirect (induced) and cumulative impacts are of concern. We find the predicted noise exposure levels for local residents due to the project to be significant for both the evaluated Proposed Project and Alternative 2 for both design years. Regarding noise mitigation, EPA believes that the presumed FAA position for this project has merit but should be expanded.

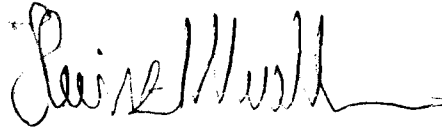
Specifically, the FEIS should clarify if the two kinds of significant noise increases of +1.5 DNL or greater defined in FAA Order 1050.1E constitute FAA's noise mitigation position for the proposed project. If so, as presumed, FAA and the Sponsor should commit to such mitigation for eligible residences (*i.e.*, already existing within or newly brought into the 65 DNL that are elevated +1.5 DNL or greater by the project) in the FEIS through a draft noise mitigation plan, and finalize such commitment and plan in their ROD. To ensure such mitigation, we recommend that the approval of the ALP in the FEIS and ROD be conditioned to mitigate for these residences. However, beyond mitigation for these significant increases, we also recommend that all eligible residences exposed to lesser residential noise elevations due to the project (*i.e.*, increments less than +1.5 DNL) but that are newly brought into the 65 DNL, should also be mitigated by the EIS process. FAA and the Sponsor should also commit to such expanded mitigation in the FEIS and ROD as outlined above.

EPA further recommends that the 2018 dataset be used as the basis for noise mitigation, that the implementation of mitigation progresses from residences experiencing higher noise levels and continue toward the 65 DNL contour, that residential acquisition from willing sellers be the noise mitigative method of choice followed by sound-proofing, that all project noise mitigation be in place by project startup (proposed for 2013), and that the Part 150 process continue to mitigate for all other residences within the 65 DNL that are unaffected by project aircraft noise.

Regarding air quality, EPA is pleased that the predicted reduction of average aircraft delay times for both considered alternatives can be expected to reduce air emissions at PBIA compared to the No Action Alternative. However, largely due to forecasted increases in aircraft operations, the DEIS indicates that criteria-based air emissions at PBIA can be expected to increase during the project design period (2013-2018), even though the DEIS indicates that these increases are not expected to exceed the NAAQS. Nevertheless, due to recent changes in the expected implementation timeline for the revised ozone NAAQS occurring before or within the project design period, the FEIS still needs to explain how increased airport emissions will not adversely impact air quality such that the area will not violate the NAAQS.

We appreciate FAA's coordination of this proposed project with us and the opportunity to review the DEIS. Should you have overall questions on our comments, feel free to coordinate with Chris Hoberg of my staff at 404/562-9619 or hoberg.chris@epa.gov. Also, NAAQS air quality issues may be directly addressed to Brenda Johnson of our Air, Pesticides and Toxics Management Division (APTMD: 404/562-9037 or johnson.brenda@epa.gov), HAP air quality issues to Paul Wagner (APTMD: 404/562-9100 or wagner.paul@epa.gov), and GHG air quality issues to Dale Aspy (APTMD: 404/562-9100 or aspy.dale@epa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Heinz Mueller", with a long horizontal flourish extending to the right.

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management

Enclosure: *Detailed Comments*

cc: Jackie Sweatt-Essick: FAA/Atlanta (email pdf file)

DETAILED COMMENTS

► NOISE

To facilitate the comparison of the evaluated Sponsor's Proposed Project and Alternative 2, EPA has consolidated selected noise exposure data for the 65+ DNL contours presented in the DEIS (Chapter 5). Inclusion of such a summary table in the FEIS (*e.g., Executive Summary*) may also be helpful to the general public's comparison of these alternatives. We offer the following summary for the two design years:

2013

Noise Exposure	Proposed Project	Alternative 2	DEIS Reference
Acreage in 65+ DNL	2,039.3 acres	2,040.2 acres	(pp. 5-113 & 5-119)
Housing Units (65+ DNL)	2,375 units	2,332 units	(pp. 5-114 & 5-120)
Est. Residents (65+ DNL)	5,890 people	5,783 people	(pp. 5-114 & 5-120)
Acreage Elevated +1.5 DNL	375 acres	673 acres	(pp. 5-116 & 5-126)
Housing Units (+1.5 DNL)	386 units	335 units	(pp. 5-116 & 5-126)
Est. Residents (+1.5 DNL)	957 people	831 people	(pp. 5-116 & 5-126)
New People (vs. No Action)	+772 people	+615 people	(pg. 5-101 & 5-101)
New Housing Units (vs. No Action)	+291 units	+248 units	(pg. 5-101 & 5-101)

2018

Noise Exposure	Proposed Project	Alternative 2	DEIS Reference
Acreage in 65+ DNL	2,210.8 acres	2,206.2 acres	(pp. 5-133 & 5-143)
Housing Units (65+ DNL)	2,667 units	2,603 units	(pp. 5-134 & 5-143)
Estimated Residents (65+ DNL)	6,614 people	6,455 people	(pp. 5-134 & 5-143)
Acreage Elevated +1.5 DNL	398.6 acres	698.2 acres	(pp. 5-137 & 5-147)
Housing Units (+1.5 DNL)	423 units	380 units	(pp. 5-138 & 5-147)
Est. Residents (+1.5 DNL)	1,049 people	942 people	(pp. 5-138 & 5-147)
New People (vs. No Action)	+808 people	+650 people	(pg. 5-101 & 5-101)
New Housing Units (vs. No Action)	+326 units	+262 units	(pg. 5-101 & 5-101)

- **AIR QUALITY** – The following detailed air quality comments are provided:

General Comment

1. It is important to note that although designations for the 2008 8-hour ozone NAAQS have not been made yet, the 2008 8-hour ozone NAAQS (0.075 ppm) is currently effective and areas will be designated for this standard by March 2010 (see schedule below: excerpted from 73 FR 16436, March 27, 2008). The 2009 state recommendations will likely be based on 2006-2008 monitoring data and the 2010 EPA designations may be based on 2007-2009 monitoring data. Current data in the Palm Beach area show attainment for the 2008 8-hour ozone NAAQS. However, we do not know whether the Palm Beach area will continue to attain or whether it will be designated nonattainment for this standard. Also, even if the area is designated attainment for the 2008 8-hour ozone standard (0.075 ppm), there is still the potential for the area to violate the 2008 8-hour ozone standard (0.075 ppm) beyond 2010 (when designations are made). When an attainment area violates a standard, the state must expeditiously implement measures to improve air quality. Therefore, the 2008 8-hour ozone standard (0.075 ppm) should be considered in all air quality planning.

***Expected Implementation Timeline for
Revised Ozone NAAQS***

Milestone	Date
Signature—Final Rule	March 12, 2008
State Designation Recommendations to EPA	No later than March 12, 2009
Final Designations	No later than March 12, 2010*
Attainment Demonstration SIPs Due	2013*
Attainment Dates	2013-2030 (depends on severity of problem)

* In the event the Administrator has insufficient information to promulgate the designations by March 12, 2010, the date of final designations may be extended up to one year, but no later than March 12, 2011. SIPs will be due three years from final designations.

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Chapter 4

Section 4.2 Air Quality (pg. 4-2)

2. *Ambient Air Quality Standards* (pg. 4-5): The State of Florida is responsible for having a State Implementation Plan (SIP) in which they include the plans and regulations that will provide for attainment of the NAAQS. Florida currently has a SIP in place.

3. Attainment/Non-Attainment Status (pg. 4-5):

- a. We recommend deleting the first two sentences in this section and replacing them with the following:

Section 107(d)(1)(A) of the Clean Air Act (CAA) defines a “nonattainment” area as one that is violating a NAAQS. If an area meets this definition, EPA is obligated to designate the area as “nonattainment”. EPA designates an area “attainment” if it meets the NAAQS for a given criteria pollutant and EPA designates an area “unclassifiable” if the area cannot be classified on the basis of available information as meeting or not meeting the NAAQS for a given criteria pollutant. If an area has a nonattainment designation but then attains the NAAQS, the state can submit a redesignation request and maintenance plan to EPA. If the request and maintenance plan are approvable, EPA will redesignate the area back to attainment. Once this is done, the area is often referred to as a “maintenance” area. The Miami-Fort Lauderdale-West Palm Beach 1-hour ozone nonattainment area was redesignated to attainment in April 1995 and became a 1-hour “maintenance” area. After promulgation of the 1997 8-hour ozone NAAQS, the 1-hour ozone NAAQS was revoked in 2005. However, some 1-hour provisions in the SIP must remain in place in order to continue proper maintenance of good air quality. Thus, the Florida SIP still includes references to ozone maintenance area obligations for the “Miami-Fort Lauderdale-W. Palm Beach area.”

- b. We also recommend adding the last sentence as follows:

All of Palm Beach County (including PBIA) is presently designated as an attainment area for the 1997 8-hour ozone standard and the remaining criteria pollutants. The NAAQS for these criteria pollutants are shown in Table 4.2.1-3.

- c. Footnote 1 on page 4-5 should say that “In 2008, EPA promulgated a new 8-hour NAAQS for ozone...”

4. State Implementation Plan (pg. 4-6): We recommend revising this section to state:

The SIP contains emission budgets, control strategies, and timelines for meeting CAA requirements. As mentioned before the Florida SIP contains plans that were used for decreasing ozone based on the area’s 1-hour ozone nonattainment designation, the subsequent redesignation to attainment and maintenance of the 1-hour ozone standard.

5. Table 4.2.1-2 National Ambient Air Quality Standards (pg. 4-7): This table is correct for the 1-hour ozone NAAQS (0.12 ppm) and the 1997 8-hour ozone NAAQS (0.08 ppm), but it does not include the 2008 8-hour ozone NAAQS

(0.075 ppm). The 2008 8-hour ozone NAAQS is effective even though there are no designations associated with it yet (they will be done in 2010). We suggest the 2008 8-hour ozone NAAQS be included in the table or at least as a footnote to the table. Finally, the latest NAAQS are located on the EPA website at <http://www.epa.gov/air/criteria.html>.

6. 2006 Air Quality Monitoring Data and Table 4.2.3-1 2006 Air Monitoring Data Near PBIA (pp. 4-9 & 4-10): It is misleading to state that Table 4.2.3-1 shows that “all of the measured air pollutant concentrations are below their respective NAAQS” by showing the highest recorded pollutant levels for ozone. The NAAQS for ozone is “violated” if the 4th maximum ozone level from three consecutive years is averaged and exceeds the 8-hour ozone NAAQS. Showing one data point (the highest recorded level in 2006) does not indicate attainment or nonattainment of the 8-hour ozone NAAQS. It could be stated that the highest recorded ozone level in 2006 was not above the 8-hour ozone NAAQS level of 0.08 ppm, but this would still not be an indication of attainment or nonattainment.
7. The FEIS should state that the West Palm Beach area was a “1-hour ozone maintenance area”. However, the Florida SIP retains some maintenance requirements that still apply for this area. It is our understanding that while general conformity is no longer a federal requirement, Florida still requires general conformity as a state requirement. The FEIS should discuss these SIP maintenance requirements and state requirements. Also, the area is currently designated “attainment” for the 1997 8-hour ozone NAAQS.
8. We recommend revising Table 4.2.1-2 which presents the EPA NAAQS. There are changes to several of the NAAQS (*i.e.*, several ozone standards, and a new lead NAAQS) that are not reflected in Table 4.2.1-2. The latest NAAQS is located on the EPA website at <http://www.epa.gov/air/criteria.html>. The table should be updated in the FEIS.
9. Section 4.2.3 states that stationary sources (*i.e.*, back-up power generators and other small miscellaneous facilities at PBIA) are not included in the emission inventory totals because they are not considered to be significant and will not be affected by the planned improvements at the airport. Excluding emissions from the EIS totals because they are considered insignificant is not normally done in the development of an EIS. In addition, it is unclear what basis one should use to determine what is or is not significant. We recommend including all applicable emissions in the summary tables in this section for the FEIS.

Chapter 5

10. Section 5.2.1 Overview of Impacts (pg. 5-3): Because statements are made in this section that there is no likelihood that future levels will exceed the NAAQS, it is critical that the 2008 8-hour ozone standard be included in Table 4.2.1-2 (*National Ambient Air Quality Standards*) in Chapter 5.

11. The DEIS did not provide any discussions on the development of air dispersion modeling to show compliance with the EPA NAAQS. With enplanements greater than 3 million passengers and aircraft operations greater than 200,000, modeling is recommended.
12. The DEIS (*e.g.*, Chapter 5) states that “[n]o significant impacts would be expected from implementation of the Proposed Project or Alternative 2” and “[s]pecifically there is no likelihood that either alternative would cause levels of pollution that would exceed the NAAQS” (pg. 5-3). Chapter 5 also states that the 2013 and 2018 emissions will be slightly higher than the 2006 baseline conditions with or without the proposed improvements. This is especially true for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) emissions. These pollutants, which are precursors for the ozone and/or PM_{2.5} NAAQS, will significantly increase with both the Proposed Project and Alternative 2. It has not been clearly demonstrated how the conclusions of “no significant impacts” and that NAAQS would not be exceeded were determined.
13. We recommend that the 2006 baseline emissions inventory be included in Chapter 5. This will help the reviewer compare the baseline and future emission scenarios.
14. We also recommend that the FEIS quantify reductions and discuss the extent to which mitigation measures and commitments will reduce air emissions toward the baseline and during construction.

Cumulative Impact Assessment

15. The cumulative impact analysis involved an assessment for air quality and other impact categories for various airport projects (Table 5.18.1-1: pg. 5-196). Several of these (*i.e.*, Taxiway L extension, Taxiway F extension, high speed taxiway exits, terminal facilities development, etc.) appear to be components of the present project. If so, we suggest that, as a cumulative impact assessment, components of the same project should also be totaled together so that a cumulative project effect would be realized. Other separate (past, present, future) on-airport projects and off-airport projects and their impacts would be listed as independent projects.

► HAZARDOUS AIR POLLUTANTS (HAPs) – EPA offers the following HAP comments on the DEIS:

1. §5.2.1 Overview of Impacts – The footnote 1 at the bottom of page 5-3 says that lead was not included in the analyses because it is no longer a component of liquid fuels. The use of aviation gasoline containing lead accounted for 45% of nationwide lead emissions in 2002. In 2002 there were 281 million gallons of leaded aviation gasoline consumed in the United States. Most of this fuel contained 2.1 grams of lead per gallon. Note that Section E.3.3 (Tables E-12 through E-18) refers to lead emissions from piston engine aircraft. A recently released report *Lead Emissions from the Use of Leaded Aviation Gasoline in the United States, Technical Support Document* (EPA 420-R-08-020,

October 2008) reports 0.4 tons of lead emitted per year at Palm Beach International Airport. If the footnote is correct that lead was not included in some of the analyses, that should be corrected in the FEIS.

2. §5.2.8 Hazardous Air Pollutants – This section stresses that the HAP emissions inventory is provided for disclosure purposes only, should not be relied upon for an assessment of health risks, should not be compared to other sources of HAPs in the region, and should not be compared to HAP emissions reported at other airports. However, we believe that the purpose of an EIS is to consider and compare the impacts of various alternatives based on information about emissions and their impacts, rather than to simply provide data. We recommend that a screening level HAP risk evaluation be prepared in order to allow an informed comparison among alternatives for the PBIA DEIS.

While we appreciate the partial HAP inventory included in the DEIS for airport related sources, we recommend that a screening level HAP risk evaluation be prepared in order to allow an informed comparison among the alternatives. The procedure for this screening level analysis can be found in Volume 1 of the Air Toxics Risk Assessment Reference Library (http://www.epa.gov/ttn/fera/risk_atra_main.html). The tiered approach described in §3.3.3 of Volume 1 begins with a simple and conservative process that may demonstrate with relatively little effort that the sources being assessed pose insignificant risk. Higher levels of analysis, if necessary, become more sophisticated, use more site specific data, and reduce uncertainty in the risk evaluation.

3. §5.18.2.1 – This section (third paragraph) says that even if the cumulative projects were to increase emissions of criteria pollutants in the vicinity of the airport, the reduced operational emissions in 2013 and 2018 for both the Proposed Project and Alternative 2 would result in a benefit in air quality at the airport. The FEIS should elaborate on this statement.

4. §6.3 – This section states that mitigation measures will be developed and commitments made to implement them after the airfield improvements are approved by the FAA. These mitigation measures are an important component of the decision process and should be discussed at the time that the alternatives are being evaluated. The list of potential mitigation measures and those to which the Sponsor will commit should be included with each alternative in the FEIS.

5. §E.3.1 – This section notes that emission inventories for HAPs are prepared for aircraft, motor vehicles, ground support equipment (GSE), and fuel storage tanks. The FEIS should consider all sources of HAPs, including, for example, area sources like surface coating operations, electroplating operations, incinerators, etc., that are related to the airport.

6. §E.3.3 – This section includes tables of current and projected HAP emissions from various source categories related to the airport. It would be helpful for the reviewer if the

text explained why there are some dramatic fluctuations in the total emissions over time as noted in Tables E-12 through E-18. For example:

- Table E-12 shows diesel PM emissions currently of 9.33 tons per year. However, in 2013, the No Action Alternative (Table E-13) shows diesel emissions fall to 1.76 tons per year, but by 2018, the No Action Alternative (Table E-14) shows the diesel emissions again rising to 9.81 tons per year.
- Similarly, in 2006 there are no emissions of xylene reported for turbine engine aircraft; yet in 2013, those emissions for the No Action Alternative are 2.05 tons, and are again zero in 2018.
- Naphthalene emissions are reported at 5.44 tons for turbine aircraft in 2006, but drop to 0.79 tons for the 2013 No Action Alternative and then increase to 5.22 tons again in 2018. However, for the 2018 proposed project, the inventory is 0.55 tons.
- The 2006 emissions of lead from turbine and piston aircraft respectively are listed in the DEIS as 5.5 and 0.34 tons. In the 2013 no build option, lead emission estimates, turbine and piston aircraft emit zero and 2.18 tons. In the 2018 no build, lead emission estimates, turbine and piston aircraft emit 0.96 and 0.04 tons. These values should be verified since the speciation profiles listed for lead from turbine aircraft are about 600 times lower than from piston aircraft (Table E-10).

The values for all the pollutants listed in these tables should be checked and if they are correct, the variability and trends suggested by the current data should be explained in the FEIS.

► **GREENHOUSE GASES (GHGs)** – EPA recommends implementation of the following measures to minimize GHGs at PBIA. The proposed runway modification provides an excellent opportunity to introduce these measures to further the “greening” of the airport, should they not already be implemented. EPA Region 4 technical assistance is available through Dale Aspy at 404/562-9041 or aspy.dale@epa.gov:

- * Electrification of all contact gates and GSE, especially for any terminal redevelopment;
- * Use of auxiliary power units (APU) by aircraft at gates;
- * Use of alternative fuels (such as compressed natural gas: CNG), electricity and diesel retrofits for airport shuttle buses and other on-airport vehicles;
- * Use of reduced idling practices, cleaner fuels (such as biodiesel), and emission retrofits for diesel construction equipment used by FAA contractors;
- * Use of more recent concepts such as “cell phone waiting areas” to minimize circling or idling traffic for passenger pick-ups;
- * Use of other innovative approaches to avoid or minimize emissions from mobile and stationary sources associated with airports and its traffic;
- * Promotion (e.g., airport practices and signage) of increased awareness GHGs relative to their effects on climate change and their reduction through energy conservation, alternative fuels and biofuels use, and reduced vehicular mileage and fuel strategies.

► **WATER QUALITY** – The proposed runway extension (Proposed Project) or new runway development (Alternative 2) would generate new impervious surfaces and therefore create additional stormwater runoff. Additionally, during construction, both alternatives could exceed State of Florida water quality standards relating to fuel spills and soil erosion. We are therefore pleased to note that measures to minimize erosion and sedimentation would be implemented (pg. 5-175). These include BMPs, project-specific design measures, and pollution control plans. We suggest that these methods be adapted to changing site conditions as appropriate and that erosion control measures, such as silt fences, be maintained periodically (*e.g.*, emptied of accumulated sediments).

Page 5-176 refers to “EPA’s NPDES permit program”. It should be noted that EPA has authorized the State of Florida to administer the National Pollutant Discharge Elimination System (NPDES) Program for Florida projects with EPA oversight. As such, the State of Florida is the permitting agency for the PBIA NPDES construction and/or operational permits even though EPA has retained oversight.

► **INDUCED IMPACTS** – The FEIS should revisit the conclusion on page 5-148. We do not fully concur with this conclusion which states that “[i]mplementation of either the Proposed Project or Alternative 2 would not result in shifts in population movement and growth, changes in public services demands, or significant changes in business and economic activity or appreciable change in employment.” While a substantive increase in development in the area due to the predicted additional enplanements/operations by 2018 may or may not be induced, an increase in vehicular traffic to and from the airport can, however, be expected to be induced by the additional enplanements/operations associated with the proposed runway modification. We note that enplanements are predicted to substantively increase from 3,418,310 in 2006 to 5,277,220 in 2018, while operations would increase from 192,755 to 238,457 in 2018 (pg. ES-8). Such increased traffic volumes would likely generate more air emissions than the current condition (*i.e.*, as a secondary/indirect or induced impact to the direct impacts of runway modification) even if the above-recommended GHG measures were implemented. Transportation demand models exist to predict such traffic emissions and may be coordinated through the local transportation planning agency.

► **ALTERNATIVES** – EPA offers these additional comments on alternatives.

1. Alternatives Review – We have reviewed the numerous alternatives considered but rejected in the DEIS. Unlike the evaluated Sponsor’s Proposed Project and Alternative 2, these alternatives were not carried forward for detailed evaluation:

* Alternatives A-2, A-4, A-5, A-6, A-7, A-10, A-12, A-14, A-16 – We agree with The DEIS (pg. ES-45) that these nine alternatives would not reduce delay times. Overall, these alternatives would not satisfy project purpose and need. These alternatives do not offer parallel runways, although they do offer use of two runways of commercial length through an intersecting or decoupled crosswind runway.

* Alternative 1, Scoping Alternative & No Action Alternative – We consider these alternatives similar to the nine above in that they would not, or would not substantively, improve delay times. The length of the crosswind runway of Alternative 1 and the Scoping Alternative would be of commercial length but would still intersect with the primary runway (Scoping Alternative) or encroach in northern off-airport residential areas requiring relocations (Alternative 1). All alternatives involving the crosswind runway as a second major commercial runway would also involve more and/or new noise exposures to northern residents and change the primary east-west orientation of the airport.

* Alternatives A-3, A-13 & A-15 – It is unclear why these alternatives, which propose retention of a close-spaced 700-ft centerline separation distance between parallel runways (instead of the apparent minimum 800-ft distance for commercial parallel runways). Moreover, this 700-ft separation is retained/proposed even if a modified/new runway is constructed. Therefore, from an operational improvement standpoint, we believe that these alternatives are not practical. Would these alternatives satisfy the project purpose and need?

* Alternatives A-8, A-9 & A-11 – These alternatives would greatly increase the centerline separation distances between the parallel runways compared to the two alternatives evaluated (e.g., 2,500 or 6,900 ft vs. 800 ft). This greater separation distance would have the advantage of facilitating the operation of the runways to further reduce aircraft delay times. However, these alternatives were rejected for various reasons such as “constructability” issues (e.g., relocating the terminal building), an overall ten-year construction time and/or high cost approaching \$2 billion, and therefore were not elevated to “Level 3” environmental evaluation.

Despite these issues, we suggest that the FEIS should at least qualitatively discuss if any of these alternatives (particularly A-8 & A-9 since they retain the current east-west flow of PBIA) have an environmental advantage over the two alternatives evaluated quantitatively. For example, would less residential noise exposures be expected as a result of the shifted runway locations of these alternatives?

* Off-Airport Alternatives – Although not considered in the DEIS, additional alternatives theoretically exist that would have proposed a new off-airport runway further north of the primary runway for fully independent runway operation (4,300-ft separation distance) to fully maximize reduction in delay times. However, these alternatives would have incurred off-airport highway (Belvedere Road) and residential constraints (Fig. ES-6) and were not considered in the DEIS.

2. Alternatives Efficiency – The DEIS indicates (pg. ES-24) that the use of roadways rather than airlines for travel is not efficient for distances beyond 500 miles due to the longer time of travel. In today’s world, however, efficiency should not be limited to time of travel since other considerations have also become important. That is, which mode of travel (roadway or airline) is more efficient in terms of using less energy and producing less CO₂? The FEIS should consider a broader definition of efficiency.

3. New Airport Alternatives – Although airport expansions can have many impacts, EPA understands the complexities of constructing a new “greenfield” airport as opposed to expanding an existing one in terms of authorization, planning time, site selection, environmental concerns, cost, and the concept of a “willing Airport Sponsor”. The DEIS (pg. ES-32) indicates that no such willing sponsor has surfaced for the PBIA region and that FAA cannot authorize a new airport. However, it may be noted that if FAA were to decide not to fund the proposed modifications at PBIA and nearby airports (*e.g.*, Fort Lauderdale-Hollywood International Airport: FLL), it would be more likely that a willing sponsor would ultimately surface due to an increasing regional demand for efficient airline service.

► SOCIOECONOMIC IMPACTS, EJ & CHILDREN’S HEALTH

1. Demographics – Using 2000 U.S. data, the DEIS concludes that disproportionately high and adverse environmental effects on minority and low-income populations would not occur under either the Proposed Project or Alternative 2 for years 2013 and 2018. Page ES-73 indicates that the majority of the people that would experience noise impacts under the two evaluated alternatives are white (69.8% and 62.2% in 2013; 69.7% and 61.7% in 2018). However, a more detailed examination of the study area demographics indicates that there appear to be pockets of high minority/black populations within the Detailed Study Area (DSA: block group 1209900321 - 69%, and 1209900322 - 23%) compared to the overall minority and black population of 14.6% within the Generalized Study Area (GSA). Within the DSA of Alternative 2, the overall potentially impacted minority population is 37.8% or 357 people compared to the overall GSA of 25%. Consequently, it is important to ensure meaningful public involvement of potential EJ communities in areas where pockets appear to exist and to assess whether the potential exists for disproportionate impacts. The FEIS should address such expected pocket concentrations.

In addition, the DEIS indicates that the percentage of people living in poverty that would experience significant aircraft-related noise exposure would be 22.4% (236 people) in 2013 and 22.4% (257 people) in 2018 for the Proposed Project compared to 13.1% (123 persons) and 13.0% (137 people) for Alternative 2 in 2013 and 2018, respectively. Overall, it appears that Alternative 2 will result in fewer noise exposures to persons living in poverty.

2. Impacts – The Proposed Project will result in the acquisition and relocation of approximately five residences and nineteen small businesses within the RPZ of the proposed runway extension. It is unclear whether these homes/businesses are owned/operated by minority/low-income groups and if they are major employers in the area. The FEIS should incorporate the number and percentage of the businesses owned or operated by potential EJ populations (pg. ES-73). Section ES 5.3.12 indicates that the acquisitions/relocations would not significantly impact the local tax base, reduce the level of service on community roads, or disrupt planned development. The FEIS should substantiate these statements with supporting information or overall community

feedback that suggests that the project will have a minimal effect on community cohesion and the economy of the local community.

Page 5-155 indicates that one multi-family HUD housing complex would experience a significant increase in noise as a result of Alternative 2, but nevertheless states that “[a]lthough this would constitute a significant noise impact, it would not constitute a disproportionate impact to low income or minority populations because acquisition and relocation of the multi-family housing complex would not be required.” This statement is unclear given that the residents of the complex will be exposed to significantly increased noise levels of at least +1.5 DNL. We note that the DEIS does indicate that the building could be sound-proofed, but it fails to commit to any measures necessary to mitigate for the substantial noise increases that will result from this project. The FEIS and ROD should include appropriate noise mitigation for this housing complex and document the number of residents at this location if Alternative 2 is pursued.

Page ES-73 of the DEIS indicates that both evaluated project alternatives would reduce air pollutant emissions when compared to the No-Action Alternative. However, it also indicates that some noise sensitive lands would experience a significant change in aircraft noise exposure within the DNL 65 noise contour. The *Executive Summary* does not provide the percentage of potential EJ populations that would experience significant noise increases resulting from the project. The FEIS should indicate how air pollutant emissions will affect potential EJ communities, and should also include the percentage and number of minority and low-income populations that would be exposed to an increase in noise exposure due to the project.

3. Mitigation – The DEIS indicates that since significant socioeconomic, EJ and children’s health and safety impacts would not occur, mitigation measures are not warranted and have not been developed. EPA recommends that this statement be reconsidered in the FEIS, given that there appear to be pockets of minority or low-income populations that would be impacted by the project at greater levels compared to the broader GSA (as indicated above, the FEIS should evaluate such expected concentrations). In addition, the DEIS indicates that low-income multi-family housing would experience significant noise exposures from the project. While a buy-out of this multi-family complex may not be required, noise mitigation such as sound-proofing should be incorporated in the project to offset such noise exposures due to the project.

4. Children’s Health – The DEIS indicates that the project would reduce air pollutant emissions compared to the No-Action Alternative (pg. 5-161) by reducing delay times. Therefore, the DEIS assumption is that the project would therefore not significantly impact children’s health. EPA notes that in the short-term, there should be no significant adverse effect on children’s health related to the six criteria pollutants. The NAAQS are designed to protect public health, including the health of “sensitive” populations such as asthmatics, children, and the elderly. While EPA agrees that the proposed modifications should result in short-term reductions in air pollutants, increased air pollutant emissions are expected in the long term due to additional operations and enplanements. This is a concern for children with asthma and other respiratory diseases (ailments that are affected

by air quality) and should be re-evaluated as the airport expands or as operations and enplanements increase.

► OTHER COMMENTS

1. Definitions – We appreciate that a *List of Acronyms* and a *Glossary of Terms* were provided in Chapter 11. For the FEIS, we suggest that the glossary also include terms such as “aviation easement”, “dependent” and “independent” runways, “centerline separation distance”, etc., even if these are discussed in the text. In some cases, certain acronyms defined in the *List of Acronyms* could also be further briefly explained in the glossary (e.g., GSA: “Generalized Study Area”; DSA: “Detailed Study Area”) or, if too complicated, cross-referenced. These definitions might also be more useful to the reviewer if presented as a preface to the main document rather than in Chapter 11.

2. Airport Operations – Beyond a brief glossary definition and as suggested in footnote 2 of the cover letter, a discussion (perhaps in the FEIS introduction) would be useful of FAA regulations and thresholds on the significance of centerline separation distances (700 vs. 800 vs. 2,500 vs. 4,300 ft) for dependent and independent commercial runways at various ARC sizes (such as ARC D-IV for PBIA). This is particularly important for this EIS since centerline separation distances relate to the level of delay time reductions possible at PBIA. As part of this discussion, we suggest that the phrase “simultaneous dependent airport arrival and departure operations” (pg. ES-58) be explained. Intuitively, “dependent” runways – such as those offered as alternatives for the present DEIS – would imply consecutive or staggered operation rather than simultaneous. However, we understand that there are various levels of dependent and independent operation based on centerline separation distances.

3. Construction Noise – Although we assume construction would not take longer than the start-up 2013 design year, the FEIS should provide a more definitive timeframe (months, years) for the construction period. That is, the term “temporary” used on page 5-148 (“...temporary noise increases due to construction...”) should be reasonably quantified. Also, noisy construction events should be limited to daylight hours unless such noise is masked by airport operations. To help minimize construction emissions, we recommend the use of reduced idling practices, cleaner fuels, and emission retrofits for construction equipment used by FAA and Sponsor contractors whenever feasible. Technical assistance in this regard is available at EPA Region 4 through Dale Aspy (see *GHGs* section above).

4. Supplemental Metrics – Page 5-103 indicates that the supplemental noise analyses provided in Appendix D were provided for “disclosure purposes only” since “FAA does not use supplemental noise analyses for determination of a project’s significant noise impacts.” We suggest, however, that supplemental noise data such as maximum overflight noise levels or single-event noise levels can be useful in describing noise exposures from aircraft at residences. Although the day-night metric (DNL) is the accepted noise descriptor for airports (per FICON) that is used by FAA to determine

the location of an airport's 65+ DNL contours, it is only a day-night average value with an added nighttime penalty. Moreover, this daily average is often further averaged (annualized) such that maximum noise levels are averaged with less noisy 24-hour events over a one-year period.

5. Corporate Jets – Page ES-8 indicates that there is increased corporate jet activity at PBIA. The FEIS should indicate the size of these corporate jets, *i.e.*, are they subject to Stage 2 or Stage 3 noise abatement requirements, and their current and predicted (design period) number of operations at PBIA. We note that some corporate jet size information was provided on page ES-42.

6. Existing Noise Abatement – Page 5-125 references that nighttime noise abatement measures are currently in place. These apparently would be shifted to the proposed Runway 9C/27C. The FEIS should discuss if any ongoing operational and land use noise abatement measures would continue, be modified, or be eliminated for the Proposed Project and Alternative 2.

7. Residential Relocations – Pages ES-53 and ES-64 indicate that the Proposed Project would relocate 5 residential parcels while Alternative 2 would relocate none. It should be noted that these relocation data only relate to the construction footprint of the proposed alternatives and not to any potential project noise mitigation, which could relocate numerous residents through home acquisition or purchase assurance.

8. Hazardous Waste Sites – The reported active and former fuel user sites (pg. ES-69) should be cleaned up according to state and/or EPA regulations. New fuel facilities at PBIA should be safeguarded to minimize any fuel or other hazardous spills.

9. Airport West Canal – We note that a portion (750 ft) of this canal would be relocated to accommodate RSA size requirements (pg. ES-7). However, remaining portions of this canal would still be located near the west ends of the primary and proposed runways for both the Proposed Project and Alternative 2. Page 5-59 suggests that the canal is habitat for wood storks and other species and that in-kind habitat replacement on airport property is planned. While EPA supports in-kind replacement in the same watershed as the impact (*e.g.*, wetland or habitat mitigation), we recommend in-kind but off-site replacement of bird water habitat so as not to attract wildlife to the airport and create potential aircraft-wildlife conflicts. To further reduce bird-strike conditions, necessary open-water areas (*e.g.*, stormwater ponds) might be covered with mesh to reduce bird use. Although EPA defers airport safety to FAA and the Sponsor, we offer that potential on-site aquatic habitat replacement, the presence of the existing and planned relocation of the Airport West Canal, and the presence of other existing or planned on-airport open water areas could all become wildlife attractants. Resolution of this issue relative to airport operations should be discussed in the FEIS. The location of mitigation areas should be further discussed with the appropriate permitting agency.

Also, we assume that the Airport West Canal is not tidally influenced since page 5-21 states that “[n]o impacts to saltwater fisheries is anticipated.” The FEIS should verify.

10. Cumulative Impacts – We appreciate the information presented for cumulative impacts (Tables ES-75 & 5.18.1-1). Both on-airport and off-airport projects and their general impacts are referenced in these tables. However, to further document a cumulative effect in the project area, we suggest that the FEIS also group these projects by impact to determine those projects that impact the same resources as the proposed runway extension (e.g., same airshed, land, residents, etc.) to better realize the potential cumulative effects if the proposed airport project were implemented.